

# STREAMLINING CLIENT MIGRATION AND DEPLOYMENT



Client migrations can put an enormous strain on enterprise resources. The end-to-end Dell™ Client Migration Solution can help save time and money while relieving network congestion—using patent-pending automation technology to help cut costs by up to 62 percent, shave administrator time by up to 88 percent, and reduce required network bandwidth up to 70 percent for client deployments.

**B**ecause they are often labor intensive and difficult to coordinate, client system deployments and OS migrations can be particularly disruptive to business as usual. Planning, scheduling, and executing deployments and migrations is also logistically challenging, especially for a large number of busy and mobile clients. In addition, deploying applications and software builds, or *images*, to branch offices and other remote locations can put an excessive strain on enterprise networks.

Because client migrations are often outside the scope of normal business operations, many organizations have not optimized their client migration processes and do not have the infrastructure or tools in place to take advantage of automation. As a result, many steps—such as creating images, deploying applications, and migrating user data—are often executed manually. Unfortunately, the manual approach can be both time-consuming and error-prone.

For example, performing migrations to the Microsoft® Windows Vista® OS can be challenging when incompatible clients need to be replaced and applications require some form of remediation. Furthermore, the new security policies and different user access controls featured in Windows Vista may require extensive changes to client settings and configurations. Finally, the increased image sizes that often result from Windows Vista deployments may put an additional strain on corporate networks.

To help organizations simplify the task of replacing or refreshing hardware, Dell launched the Dell Client Migration Solution, a portfolio of assessment, design, implementation, and management services that combine industry-standard best practices and automation technology designed to execute client migrations quickly and cost-effectively. The results can be tremendous: research shows that companies that optimize their deployment practices enjoy significantly reduced costs to deploy PCs, as much as 62 percent less (over US\$400 per PC) compared with companies using basic deployment practices.<sup>1</sup>

## **AUTOMATED DEPLOYMENT HELPS SIMPLIFY LOGISTICS, REDUCE DISRUPTION**

At the heart of the Dell Client Migration Solution is the Dell Automated Deployment (DAD) technology, a set of patent-pending tools and processes. DAD uses a “load in factory, customize anywhere” approach to client migration that helps dramatically simplify logistics, minimize business disruption, and reduce the strain on enterprise resources.

DAD technology provides a superset of content—including images, applications, and the DAD tool—that is preloaded onto client systems at the factory. For hardware replacements, the content is loaded directly onto the client. For software refreshes, the content is loaded onto a portable hard drive.

<sup>1</sup>“Dell PC Deployment Optimization Model,” IDC white paper sponsored by Dell, Doc #205282, January 2007, [DELL.COM/Downloads/Global/Services/Main/IDC\\_Whitepaper.pdf](http://DELL.COM/Downloads/Global/Services/Main/IDC_Whitepaper.pdf).

After a client system or hard drive arrives at its destination, the administrator is prompted by a simple “one touch” interview to select the appropriate user profile, and the DAD tool installs the corresponding image and applications. IT administrators can also select an update location on the network to have the client content synchronized with new updates. Finally, the DAD tool migrates end-user data and settings.

This automated deployment model can help achieve the following benefits:

- Minimize server and network congestion:** Because images and applications are preloaded onto the client system at the factory, only content updates need to be downloaded over the network. As a result, DAD can help reduce the network bandwidth required for client deployments by an estimated 70 percent.
- Increase flexibility and simplify logistics:** By customizing preloaded images and applications at the client destination, DAD helps eliminate the need for complicated staging centers. This approach also enhances flexibility in routing client systems, because specific hardware does not have to be assigned in advance to a particular individual.
- Maximize multitasking:** Administrators can initiate a deployment and then quickly move on to the next client system. Because DAD automates application installation and migration of end-user data, it is expected to reduce the amount of time an administrator spends replacing or refreshing a client system by up to 88 percent.<sup>2</sup>
- Minimize end-user disruption:** By helping dramatically reduce the time required to deploy client systems, DAD minimizes disruptions to end users—and ongoing business operations.
- Minimize strain on the help desk:** By automating the deployment process, DAD helps avoid application installation errors and subsequent inquiries to the help desk—for example, if an

	<b>Basic</b> <i>No documented or repeatable process</i>	<b>Standardized</b> <i>Documented manual process</i>	<b>Rationalized</b> <i>Documented and mostly automated</i>	<b>Dynamic</b> <i>Fully automated for end users</i>
<b>Deployment management</b>	Client systems deployed individually	Project managed; deployment script for administrators	Deployment projects consolidated by locations; continuous business process improvements formalized	Central deployment management system linked to configuration management database and administrator dispatch
<b>Staging and logistics</b>	Multiple legs for warehousing and staging	Central staging with less than two-week supply chain	Staging only for remote users	Just-in-time ordering; product moves directly from original equipment manufacturer (OEM) to user
<b>Imaging</b>	No central image standard	Centralized image; may be deleted on arrival	Centralized image with quarterly updates	Cross-platform image; department overlays; loaded in factory
<b>Applications</b>	Loaded from CD or network share	Electronic software distribution system covering less than 25 percent of applications	50-90 percent packaged departmental applications	90 percent or more packaged integrated entitlement
<b>User state migration</b>	Files copied manually	In-house tool to move data; manual settings	Off-the-shelf tool to move data and change settings	Automated for end users to run
<b>Day-after support for end users</b>	No proactive process	On-site administrator to answer questions	User FAQ, augmented by help desk and on-call support	Remote issue resolution from a command center


**Figure 1.** The Dell client optimization deployment model is designed to minimize infrastructure dependencies and enable out-of-band deployments for remote users


administrator misses key steps. Also, DAD saves a backup copy of the client system’s image before commencing the installation, to expedite recovery of user data or settings if necessary.

### EXPERT CONSULTING SERVICES HELP MINIMIZE COST AND RISK

The Dell Client Migration Solution helps calculate the current cost of deployment and recommends ways to streamline the process and improve the infrastructure to take advantage of the automated deployment model. Following industry-standard best practices, Dell Services experts create an optimized deployment model that can be tailored to the specific needs of an organization (see Figure 1). Dell Services then executes the deployment using DAD technology.

By simplifying client migration through best practices and automated deployment

techniques, organizations can dramatically lower the cost of deployment, minimize end-user disruptions, and reduce business risk. 



QUICK LINKS

**Dell Client Migration Solution:**  
[DELL.COM/Services/Deployment](http://DELL.COM/Services/Deployment)

**Dell Readiness Advisor tool for Microsoft Windows Vista:**  
[support.dell.com/support/topics/global.aspx/support/product\\_support/en/vista\\_test](http://support.dell.com/support/topics/global.aspx/support/product_support/en/vista_test)

**Dell Deployment Optimization Calculator:**  
[roianalyst.alinean.com/calculators/dell/optimization/Dell\\_Deployment\\_Optimization.html](http://roianalyst.alinean.com/calculators/dell/optimization/Dell_Deployment_Optimization.html)

<sup>2</sup> Based on an internal assessment of select Dell customers compiled from October 2006 to October 2007.